The task of taking the
animals to the river to drink and bathe, or of moving 231 [462]
them to another area to graze (if pegged) is often the
duty of young boys.

Rinderpest was introduced to the Philippines in 232
1888 and ten years later the disease appeared in Siaton,
killing many carabaos. In 1920 and again in 1940 rinder-
pest struck in Siaton decimating the carabao herd.
There is no specific native medicine for rinderpest, al-
though many owners treated their animals with the same
medicines used for diarrhea or dysentery in humans. A
white film sometimes grows over their eyes and, if not
cured, results in blindness. One medicine applied by
the barriofolk to eyes so afflicted is a mixture of salt,
powdered clay pot, and crushed red peppers! Native
veterinarian specialists are called mangalapon; there was
none in Caticugan but one lived in Sandolot. To my ~~knowl-~~
edge he never came to Caticugan to treat a sick animal;
this was done by the owner.

Carabaos are sometimes bitten by a poisonous 278 232 757 824
spider (lawalawa). As a result of the bite, both humans
and carabaos are reported to suffer a swollen abdomen and
to be unable to urinate; death sometimes results. Treat-
ment is the same for carabaos as for humans. The follow-
ing ingredients are used: roots of the bonn (Abrus
precatorius Linn.), tubli (Derris), ongali (Uvaria rufa
Blume) and pakobol vines; roots of the homokan, salowasowa
(Citrus hystrix, family Rutaceae) and pauli trees, and
roots from the taghoy bush, (Canthium gynochthodes Baill.)

278
232
757

The roots are powdered and mixed with juice squeezed from young pineapple leaves. Some water is added and the mixture is boiled in a pot; banana leaves are stretched over the top to retain the steam. The person or carabao bitten is completely covered with a blanket. Then the boiling pot is placed under the blanket after a few holes have been punched in the top so the steam can escape. When the liquid cools the blanket is removed and the person or carabao rubbed down with the mixture.

Cattle

231

Before the war (1939) there were 61,880 cattle in Negros Oriental in comparison with the 39,950 in Negros Occidental.[76] Siaton had a thriving cattle industry before the war. A Spaniard who lived in Bais had a herd of more than 3,000 cattle that he grazed on Bondo. He owned such varieties as Indian (called Injun by the barriofolk), Sindi, Swiss, Nellori, a common Indian breed that may have come to the Philippines from Australia. Most families living in Bondo owned from four to six head of cattle; they usually owned more cattle than the barriofolk in other parts of Siaton municipality. The cattle were taken by truck to Dumaguete and then shipped to Manila.

Most of the cattle of the island were killed during the war; in 1948, there were only 17,870 head in Negros

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[76] Yearbook of Philippine Statistics: 1946, p. 169.

20: Hart E-5 (195.) 1954 OAI Philippines OA.
Central Bisayan OA14

After several weeks the flow of water into these channels is stopped by blocking with stones, sand or a piece of old matting. At the channel's lower end a balantak trap is placed; the water runs out through the trap, catching most of the fish or shrimp. When all the water has run out, the people search the dry bed of the channel, to pick up stranded shrimp, fish and crabs.

One man in Talo-ot had been using the same malad-om channel for three years; any person may make a channel as long as they do not interfere with others. Sometimes an abaca net (also called balantak) is used in gamala but the balantak trap is much more common. During the rainy season it is impossible to use this method of catching fish; the sandy river flats are flooded with deep water.[17]

LOCAL PISCICIDES

The most common method of fish poisoning is to crush plant materials (roots, leaves, fruits, seeds or bark) and dump them into the water. Plant material may be soused in a container of water and this mixture poured into the place to be poisoned--a method best suited to plants of high toxicity. Plant poison may be ground, mixed with other materials (fish, worms, etc.)

[17] Capistrano describes a similar method of fishing in Mindanao that is called pamala. In pamala small pools are emptied by using large kerosene cans or bamboo dippers in order to get the fish in the pool, usually halo-an. Ramon J. Capistrano, "The Fishing Industry in Cagayan, Manila, 1915." Manila, Bisaya Ethnology, Beyer Collection, I-V, No. 110, 1918, p. 9. Typescript.

and made into small pellets of bait. Some people use inorganic chemical poisons like lime. The toxins in the plants vary; some are stomach poisons, others affect the functioning of the respiratory system through haemolysis of the red blood corpuscles. The plants most commonly used as piscicides contain toxins of saponins, alkaloids and glucosides. Most piscicides act fairly rapidly; the full effect is achieved normally within half an hour.[18]

Five different plants are known or used by the barriofolk of Caticugan as fish poisons for both river and pelagic fishing. These piscicides are: the vines lagtang (Anamirta cocculus (Linn.) W. & A.) and tubli (Derris elliptica (Roxb.) Benth.), a bush called soro-soro (Euphorbia neriifolia L.), the kasay tree bark and the fruit and bark of the bito-on (Barringtonia asiatica (Linn.) Kurz) tree. The most popular one is lagtang.

I never saw Caticugan barriofolk use fish poisons, although they were well-informed about the techniques. The Siaton River near Caticugan does not lend itself to such a method of fishing; it lacks small riverside pools and the current is fairly swift. In the northern barrios of the Siaton River valley the people utilize piscicides more frequently. There are more creeks, the river's current is gentler with many shallow pools.

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[18] Robert F. Heizer, "Aboriginal Fish Poisons," Anthropological Papers, No. 33-42, Bulletin 151, Bureau of American Ethnology, Washington, D.C., 1953, pp. 231-2, 239.

In the fishing barrios lagtang is used for certain types of pelagic fishing.[19] 226

When the fish corrals are destroyed by the southwest monsoon, the men in fishing communities like Malabuhan fish with hook and line when weather permits. They use lagtang as a piscicide, frequently to obtain live bait. Lagtang's fruit is red when ripe, the seeds are brown. The vine flowers in March and the fruits are collected in May. In Malabuhan the people often buy lagtang seeds for five cents a pound; lagtang does not grow near Malabuhan and has to be sought in the hills. Lagtang seeds contain picrotoxin, other bitter principles and two alkaloids. One of the best known of Asian piscicides, lagtang, is "one of the commonest [plants] used as a fish poison in the Philippines."[20] 226 278

The fruit of the lagtang is dried in the sun with care not to over-dry, since this is said to make the

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[19]Piscicides are still widely used in the Philippines. An author from Camiguin Island, off the northern coast of Mindanao, recently wrote: "Aside from fishing with TNT, more than a few fishermen in Camiguin still use poison herbs, including tubli and lagtang to kill fish. This practice is almost as destructive as dynamite fishing itself." Rafael A. Bautista, "Disappearing Paradise," The Philippines Free Press, XLIV, No. 8 (February 21, 1953), pp. 20-1. Dynamite fishing became a serious problem after the last war that left large supplies of explosives in various parts of the Philippines.

[20]Brown states "The fruit is used as a fish poison and is also poisonous to other animals...In preparing the poison the fruit is heated until dry and then crushed and powdered." Brown, op. cit., I, p. 530. Encarnacion wrote that the juice obtained from the lagtang roots, mixed with water, was used as a medicine for sore eyes and the fruit was used as a piscicide. Quisumbing, op. cit., pp. 145-6.

226
278

seeds very toxic. Once dried, the outer skin is peeled off and the seeds are roasted in a frying pan. Lagtang seeds must not be heated too long or they become so toxic that the fish sink instead of floundering stupefied on the surface. Then the seeds are pounded and mixed with finely-cut fish, cooked cornmeal or mashed land crabs and sand; sand makes the mixture heavy so it will sink. When the fish eat this mixture they "come to the surface very dizzy and act crazy and we scoop them up with the sikpas"--a butterfly-like net with a handle. Since all the fish do not come to the surface this type of fishing is wasteful, particularly if the poison is very potent.

Tubli is another common piscicide. Wray's description of the use of tubli by the Malays approximates the technique used in the Philippines--and in Caticugan.[21] The stem and roots of this vine are cut, sometimes mashed, then placed in water to soak out the toxin. Tubli is used in the river and in rocky pools along the seashore. The lack of such pools between Malabuhan and the Siaton River mouth may be one reason why tubli is used so infrequently.

Soro-soro is not as potent a piscicide as tubli. Both soro-soro leaves and its fleshy branches are utilized. Soro-soro is cultivated in Manila and some large towns; Quisumbing believes it is an introduced species.[22]

[21] Quisumbing, op. cit., p. 149 who quotes Wray; tubli is said to be cultivated in Malaya for use as a piscicide.

[22] Ibid., p. 156. Soro-soro is also used as a fish poison by the Igorots.

226
278

Scrapings from the bark of the kasay tree are used as a fish poison. Both soro-soro and kasay are rarely used in Siaton.

The bito-on is a common tree that grows along the seashore in the Philippines. The tree's seeds contain a glucoside, barringtonin; both the bark and the seeds are used as a fish poison.[23] The flesh of bito-on fruits is eaten when ripe, in Siaton; the grated bark is also mixed with binakhao (finely-diced raw fish that many people consider a delicacy). In Caticugan the flesh of the fruit is used also as a piscicide; it is chopped or rubbed against sharp coral rocks in the pools. Sometimes the bito-on flesh is roasted, powdered and mixed with fine ashes or chopped fish. One informant reported an experience with bito-on that is probably typical of its use by many barriofolk.

> One day while my cousin and I were taking a bath in the river he became excited to discover plenty of fish in a deep part of the river. I told him that we could not do anything to catch the fish. But my cousin said we should go home and get some of the fruit and bark of a bito-on tree that grew near his house. We did this and threw it [bito-on fruit] into the water where the fish were swimming. We caught plenty of fish and shrimp and eels.

Not all Caticugan barriofolk, however, knew that bito-on could be used as a piscicide.

Povedano's manuscript (1578) states that the early inhabitants of Negros used two piscicides, tubli

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[23] Ibid., p. 165. Bito-on has been found to be most effective as a piscicide when used at dawn.

226
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and laktang (i.e., lagtang). Tubli roots were crushed; laktang fruits were roasted and pulverized with dried shrimp. Both Palencia and Capistrano mention Filipinos using tubli as a piscicide.[24] Povedano also wrote that tigao leaves were mixed with those of the lampuyan to make a fish poison.[25] Aguirre reports (1916) that the people of Negros Occidental used lagtang seeds; the roasted seeds were pounded and mixed with algae that stunned but did not kill the fish. Aguirre also mentions the use of tuba (Jatropha curcas Linn.) or kasla, producing a piscicide that killed not merely stupefied the fish.[26] Tuba was introduced into the Philippines from Mexico by the Spaniards; it is now pantropic in distribution. Tuba's English name is "Physic Nut" tree and the seeds contain a toxin called toxalbumin curcin.[27]

[24]Teofilo Panencia "The Life of a Bisaya Fisherman," Manila, Bisaya Ethnology, I-V, Beyer Collection, 1918, p. 4. Typescript. Vide Capistrano, op. cit., p. 10.

[25]Probably Povedano's lampuyan is lampuyang (Curcuma longa Linn.) that is a source of tumeric. However, the lampuyang that grows in Caticugan, identified by a specimen, is Curcuma zedoaria (Berg.) Rosc.; Brown makes no mention of it being used as a fish poison. Povedano's tigao is probably tigau (Callicarpa cana Linn.), a shrub whose leaves are used as a piscicide, according to Brown. Neither of these two plants, lampuyang or tigau, were used as fish poisons in Caticugan. Brown, op. cit., I, pp. 425-8 and Brown, op. cit., III, p. 277.

[26]Eulogio Aguirre "How the Early People in Occidental Negros Obtained Their Food." Manila, Bisaya Ethnology, Beyer Collection, I-V, 1918, pp. 3-4. Typescript. Magahats use tuba as a fish poison, soaking the pounded fruits in a container of water and then pouring the mixture into the river or creek. It is reported the toxin takes about 20 minutes to stupefy the fish. Magahats also use tubli and lagtang. Oracion, op. cit., pp. 77-8.

[27]Eduardo Quisumbing "Philippine Plants Used for Arrow Poisons," The Philippine Journal of Science, LXXVII, No. 2 (June 1947), pp. 137-8. In Caticugan there is also a plant called tuba-tuba (Jatropha gossypifolia Linn.)